CANADA FOUNDATION FOR INNOVATION

John R. Evans Leaders Fund

Guidelines for completing an unaffiliated proposal

March 2021



Introduction

These guidelines are for researchers and research administrators of eligible institutions preparing and submitting a proposal to the FCI's John R. Evans Leaders Fund (JELF).

The CFI encourages researchers to consult with their research office and to refer to internal institutional practices for submitting JELF proposals. For more information on this fund, consult the JELF program description on the CFI's website, <u>Innovation.ca</u>.

NB: To submit a partnership proposal to the JELF (affiliated with any of our funding partners' programs), consult the <u>Guidelines for completing a partnership proposal</u>.

Program description

At a time of intense international competition, the JELF is a critical strategic investment tool designed to help institutions attract and retain the very best of today's and tomorrow's researchers. The fund's name pays tribute to the outstanding contributions of John R. Evans, the first Chair of the CFI's Board of Directors.

The JELF enables a select number of an institution's excellent researchers to undertake innovative research by providing them with the foundational research infrastructure required to be or to become leaders in their field. In turn, this enables institutions to remain internationally competitive in areas of research and technology development that are aligned with their strategic priorities.

Proposals are assessed based on the following criteria:

- Research or technology development
- Researchers
- Infrastructure
- Sustainability
- Benefits to Canadians.

The criteria to be addressed depend on the amount requested from the CFI.

Submission deadlines

There are three submission deadlines per year. If the deadline falls on a weekend or holiday, it will be extended to the following business day.

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Submission date	Anticipated decision date	
February 15	June	
June 15	November	
October 15	March	

Eligibility

Eligible institutions

Universities recognized as eligible by the CFI can apply to the JELF if they have a minimum annual average of \$200,000 over the last three years in research funding received from the three federal research funding agencies (the Canadian Institutes of Health Research, the Natural Sciences and Engineering Research Council of Canada and the Social Sciences and Humanities Research Council of Canada). For each institution that meets this criterion, dedicated JELF allocations are calculated and communicated to the institution.

The Small Institution Fund (SIF), which is part of our John R. Evans Leaders Fund, was created for institutions whose dedicated JELF allocation would be calculated as less than \$800,000. Each SIF-eligible institution can draw from this fund to a maximum of \$400,000 or \$800,000, depending on their share of tri-agency funding. No special steps are required for eligible institutions to access the Small Institution Fund when submitting a proposal to the JELF.

Research hospitals and research institutes must apply through the eligible university with which they are affiliated.

We encourage institutions to develop multi-institutional projects. This can include collaborating with other institutions for research and technology development, knowledge or technology transfer or to share the research infrastructure to optimize its use and sustainability.

Eligible researchers

Up to three researchers may be listed on the proposal to either work collaboratively using the same requested infrastructure, or to work independently while sharing the requested infrastructure. For the latter, the CFI requires that the justification for the infrastructure be articulated for each researcher.

The researchers listed in the proposal must be:

- Recognized as innovative leaders or have demonstrated the potential for excellence in the proposed research fields;
- Engaged in or embarking upon research or technology development that is innovative, high quality and meets international standards; and,
- Current faculty members with full-time academic appointments or candidates that the university is in the process of recruiting to full-time academic positions in an important strategic sector.

Researchers who have previously been supported by the CFI can submit another proposal.

Eligible infrastructure projects

Eligible institutions can submit proposals requesting up to \$800,000 from the CFI, with a maximum total eligible cost of \$2 million. The CFI will allow the submission of proposals requesting less than or equal to \$75,000 from the CFI from the social sciences, humanities and arts, and/or those universities that have access to the Small Institution Fund.

An eligible project involves the acquisition or development of research infrastructure to increase research capacity and enable innovative research activities. This includes the acquisition of workhorses (high usage equipment that routinely and dependably perform over a long period of time), and the upgrade or replacement of aging infrastructure.

Research infrastructure expenditures and in-kind contributions from eligible partners must have been incurred no earlier than six months prior to the proposal submission deadline. We consider expenditures incurred when goods are received, services have been rendered or work has been performed.

For more information on CFI eligibility guidelines, please refer to the <u>Policy and program guide</u>.

Advanced research computing infrastructure

Institutions may submit proposals including advanced research computing infrastructure and related resources to carry out a research or technology development project. The CFI believes that investments in advanced research computing infrastructure are maximized when those resources are shared. We therefore expect that research computing resources costing more than \$100,000 will normally be housed, managed and operated by Compute Canada. Although this is the CFI's preferred approach, it is not intended to be an iron-clad rule. We recognize that there are instances where, for compelling reasons, research computing infrastructure is best housed, managed and operated by institutions.

The CFI expects all institutions to consult with Compute Canada when planning to request advanced research computing infrastructure. For such cases, please visit <u>Compute Canada's website</u> for information on the established process to facilitate collaborations with institutions. If, however, an institution chooses not to consult with Compute Canada, the CFI will conclude that the institution is planning to assume full responsibility for the operating and maintenance costs of the proposed infrastructure, including the research computing component.

Advanced research computing infrastructure normally includes systems or resources such as:

- Capacity or throughput computing
- Capability computing supporting tightly coupled, fine-grained applications
- Shared memory systems
- Systems supporting very large memory requirements
- High-performance storage
- Long-term storage
- Cloud computing
- Computing using specialized accelerators, including GP-CPU and others
- High-performance visualization systems
- Systems suitable for computational steering and interactive use.

In each case, advanced research computing infrastructure encompasses both the software and environment needed for a given discipline to effectively utilize these types of infrastructure such as high levels of data security and integrity.

Guidelines for proposal preparation

Researchers and institutional research services personnel must use the <u>CFI Awards</u> <u>Management System (CAMS)</u> to prepare and submit proposals. Select "John R. Evans Leaders Fund – Funding for research infrastructure" when creating a new proposal in CAMS.

For multi-institutional proposals, contact the JELF Manager (Olivier Gagnon, <u>Olivier</u>. <u>Gagnon@innovation.ca</u>) by the submission deadline to communicate the dollar value of your institution's share of the proposal.

It is important that all submissions conform to the guidelines provided on the CAMS electronic proposal forms as well as those outlined in this document. It is strongly recommended that researchers and institutional research services personnel review the completed forms before submitting them electronically to ensure that proposals comply with these guidelines.

Guidelines for attachments

CAMS will automatically paginate proposals when they are submitted. Documents should not be individually paginated prior to being uploaded to the electronic system.

Page formatting

Since reviewers will assess proposals electronically, the applicant should only use a standard, single-column on an 8.5" x 11" page layout for documents. Avoid using a two-column or landscape format since it may reduce legibility.

The proposal must be clear and easily readable. Legibility is of paramount importance and should take precedence in the selection of an appropriate font for use in the proposal. The applicant is strongly encouraged to use a 12-point, black font and use single line spacing (six lines per inch) with no condensed type or spacing.

Additionally, the CFI expects documents to conform to the following guidelines:

- **Header:** Indicate the applicant institution on the top left and the project number on the top right of each page.
- Footer: Do not include any information in the footer as this area will be used for automatic page numbering.
- **Page margin:** Insert a margin of no less than 1 inch around the page. The header may be within the margin.
- File format and size: Only PDF files may be uploaded. Documents in other formats should be converted to PDF prior to being uploaded and should not be encrypted or password protected. The file size must not exceed 20 megabytes.

Adherence to the page formatting guidelines noted above is necessary to ensure that reviewers receive legible proposals and that no applicant will have an unfair advantage by using smaller type, line spacing or margins to provide more text in the proposal. Failure to adhere to these guidelines may result in the CFI returning a proposal for revision.

Proposal structure

The proposal consists of two modules within CAMS:

- **Project module:** information about the proposed project and how it meets the criteria of the funding program
- Finance module: information pertaining to the budgetary details of the proposal
- Suggested reviewers module: list of potential reviewers of the proposal

The forms in CAMS will dictate the maximum number of characters that can be included in each section and/or the page limits for uploaded documents.

Project module

The project module consists of the following sections:

- Project information
- Plain language summary
- Researchers
- Assessment criteria
- Financial resources for operation and maintenance
- Attraction and retention of leading researchers (to be completed by the institution)
- Past/current CFI investments (to be completed by the institution).

Project information

This section captures basic information about the project such as the title, applicant institution and keywords.

Plain language summary (1,500 characters)

Provide a short summary in plain language of the proposed project: what is being researched, how it is being done and why it is important. Focus on the expected impact and benefits to Canada, beyond research or technology development accomplishments. This summary will not be used in the review process but it may be used in the CFI's communications products and on its website if the project is funded.

Researchers

Researchers included in the proposal must have a CAMS account and agree to participate in the project before the proposal can be submitted to the CFI. The researchers' curricula vitae will be automatically appended to the proposal.

Assessment criteria

Upload a PDF document that contains key information on how the proposal meets the assessment criteria for this program. Ensure that the document follows the guidelines for attachments. Address each criterion in the order in which they appear below.

Each assessment criterion will be evaluated against a standard. Each criterion includes aspects that must be addressed in the proposal. Failure to do so will weaken the proposal. Expert reviewers and/or expert review committees will be asked to rate the degree to which the proposal meets each standard.

The number of criteria to address and the page limits for this PDF document depend on the amount requested from the CFI in the proposal. The attachment allows institutions maximum flexibility to address each criterion, including the use of figures or diagrams where appropriate. The exact distribution of pages for each criterion is at your discretion.

Total CFI request (\$)	Assessment criteria	Maximum number of pages
Less than or equal to \$75,000	Research, Researchers, Infrastructure	10
More than \$75,000 to \$800,000	All	15

Assessment Criteria

RESEARCH OR TECHNOLOGY DEVELOPMENT

The research or technology development activities are innovative, feasible and meet international standards.

- Describe the proposed research or technology development activities conducted in an area of institutional priority.
- Demonstrate the innovativeness and feasibility of the proposed activities by positioning them within the national and international context, describing the proposed approach and including references.

INFRASTRUCTURE

The infrastructure is necessary and appropriate to conduct the research or technology development activities.

- Describe each item and justify its need to conduct the proposed activities. For construction or renovation, provide a description of the space including its location, size and nature. Use the item number, quantity, cost and location found in the "Cost of individual items" table. Provide a cost breakdown for any grouping of items.
- Explain why existing infrastructure within the institution and the region cannot be used to conduct the proposed activities.

Note: For construction or renovation, a detailed cost breakdown, timeline and floor plans must be provided in a separate document as part of the finance module.

RESEARCHERS

The researchers demonstrate excellence and leadership at a level appropriate for the stage of their career. The researchers have the expertise or relevant collaborations to conduct the research or technology development activities.

- Describe the researchers' track record, including scientific and technical expertise relevant to conduct the proposed activities.
- Describe the collaborators' and partners' contributions essential to the success of the proposed activities.

SUSTAINABILITY

The infrastructure is optimally used and sustainable through tangible and appropriate commitments over its useful life.

- Present a management plan that addresses the optimal use (e.g. user access and level of use), and the operation and maintenance (O&M) of the infrastructure over its useful life.
- Provide detailed information on O&M costs and revenue sources, including institutional commitment. Refer to the "Financial resources for operation and maintenance" tables.

BENEFIT TO CANADIANS

The research or technology development results will be transferred through appropriate pathways to potential end users and are likely to generate social, health, environmental and/or economic benefits to Canadians, including better training and improved skills for highly qualified personnel.¹

- Briefly describe potential socioeconomic benefits, including better training and improved skills for highly qualified personnel.
- Delineate the knowledge mobilization plan and/or technology transfer pathways, including partnerships with end users.
- ¹ Highly qualified personnel include technicians, research associates, undergraduate students, graduate students and postdoctoral fellows.

Financial resources for operation and maintenance

This section of the project module captures the annual costs and sources of committed support to ensure the effective operation and maintenance (O&M) of the infrastructure for the first five years after implementation.

When the useful life of the requested infrastructure is longer or shorter than five years, the "Assessment criteria" section of the proposal should provide complementary information regarding the operation and maintenance needs for these items over their useful life. Do not include costs related to research and/or technology development.

The useful life of the research infrastructure is considered to be the period of time over which it is expected to provide benefits and be usable for its intended purpose as per the proposal, factoring in normal repairs and maintenance.

The CFI will contribute to the operation and maintenance costs of funded projects under the JELF through its Infrastructure Operating Fund (IOF). Support from the IOF will be equivalent to 30 percent of the CFI contribution to the capital cost of projects funded under the JELF. If funding sources include the IOF, list this amount in the "institutional contribution" category.

The institution has the flexibility to distribute its IOF allocation based on actual operating and maintenance needs as opposed to allocating the exact amount to the project that generated it, in accordance with its internal plan for the provision and administration of operating and maintenance support.

Attraction and retention of leading researchers

This section is to be completed by the institution by selecting whether the infrastructure requested will be used to attract a new researcher to the institution or to retain an existing faculty member. The information is used for statistical purposes only.

- Attraction: Less than 24 months since researcher's full-time academic appointment
- Retention: More than 24 months since researcher's full-time academic appointment

Past/current CFI investments

This section is to be completed by the institution to indicate whether the infrastructure will support research activities in which the CFI has or has not previously invested. This information is used for statistical purposes only.

Finance module

The finance module consists of the following sections:

- Cost of individual items
- Construction or renovation plans (if applicable)
- Contributions from eligible partners
- Infrastructure utilization
- Overview of infrastructure project funding (generated automatically read only).

The tables in the "Overview of infrastructure project funding" section in CAMS will be automatically populated with information taken from other sections of the finance module. Note that the amount requested from the CFI is calculated based on the difference between the total contributions from eligible partners and the total eligible costs.

Cost of individual items

The CFI recommends that institutions bundle items into functional groupings when completing the "Cost of individual items" section, and provide details and justification for each item within a group when addressing the infrastructure criterion in the assessment criteria document. The CFI's <u>Policy and program guide</u> outlines the eligible costs for infrastructure projects.

List only the eligible infrastructure acquisition and development costs. List the full cost of each item. Retain documentation (price lists, quotes, etc.) so they can be provided to the CFI if requested.

Please note:

- If the infrastructure will be used for purposes other than research or technology development, list only prorated research or technology development costs.
- The total eligible costs must include taxes (net of credits received), shipping and installation. However, taxes must not be calculated on the in-kind portion.
- Follow your existing institutional policies and procedures when preparing budget estimates. Costs included in this budget are expected to be close estimates of fair market value. Refer to the <u>Policy and program guide</u> for information on how in-kind contributions must be assessed.

Construction or renovation plans

Applicant institutions must provide the following information:

- A timeline identifying key dates for the various stages of the proposed construction or renovation;
- Floor plans of the proposed new area(s), showing the location of the infrastructure and the scale of the plans (when construction or renovation involves multiple rooms). The floor plans must be legible when printed in black and white on standard letter-size paper (8.5" x 11");
- The overall cost of the construction or renovation project, categorized by cost component (i.e. direct costs, soft costs and contingency costs), when these costs are expected to be in excess of \$500,000.

Note: The timeline, floor plans and cost breakdown should be uploaded as a separate PDF document. These pages do not count toward the page limit for the "Assessment criteria" section of the proposal.

Contributions from eligible partners

List all contributions from eligible partners. Do not include the amount requested from the CFI. Provide the partner name and type, as well as a breakdown of contributions (cash and in-kind) for each eligible partner. Bundle all expected in-kind contributions from vendors into a single line. If partner contributions are expected but have not yet been confirmed, outline the plans for securing these funds.

Infrastructure utilization

Explain the use of the requested infrastructure for CFI-eligible and non-eligible purposes and any applicable prorating of costs.

Suggested reviewers

Identify a minimum of six reviewers who are well qualified to review the proposal and who are not in conflict of interest. A conflict of interest may be deemed to exist or perceived as such when reviewers:

- Are a relative or close friend, or have a personal relationship with the project leader or other researchers included in the proposal;
- Are in a position to gain or lose financially/materially from the funding of the proposal;
- Have had long-standing scientific or personal differences with the project leader or other researchers included in the proposal;
- Are currently affiliated with the project leader's or other researchers' institutions, organizations or companies, including research hospitals and research institutes;
- Are closely professionally affiliated with the project leader or other researchers, as a result of having in the last six years:
 - frequent and regular interactions with the project leader or other researchers in the course of their duties at their department, institution, organization or company;
 - been a supervisor or a trainee of the project leader or other researchers;
 - collaborated, published or shared funding with the project leader or other researchers, or have plans to do so in the immediate future;
 - · been employed by the applicant institution;
- Feel for any reason unable to provide an impartial review of the proposal.

Note: the decision whether to use suggested reviewers remains with the CFI.

Review and decision making

The CFI merit review process is designed in a structured manner to assess whether proposals meet the criteria of the JELF.

Applicant institutions must provide all the necessary information to enable the reviewers to review the proposal in accordance with the criteria established by the CFI and presented in the Assessment Criteria section.

Review process

The CFI will first undertake an administrative review of the proposals to ensure they are eligible and complete. CFI staff will follow up with institutional research services personnel if needed. The merit-review process is tailored to the complexity of the proposal. When the CFI request is:

• Less than or equal to \$400,000

Proposals are reviewed by a minimum of two experts who provide a written review to the CFI. Should a proposal receive divergent reviews, have a proposed research plan that spans diverse disciplines or is otherwise complex, the CFI may:

- · Request a teleconference with reviewers of the proposal;
- · Seek the input of an additional reviewer; and/or,
- Seek the input of the JELF Advisory Committee.
- More than \$400,000 to \$800,000

Proposals are reviewed by an Expert Committee.

The review process for proposals submitted by an institution from Québec is administered by Expert Committees under the jurisdiction of the Government of Québec following a longstanding partnership between it and the CFI.

To coordinate the review process and avoid duplication of review efforts, review materials are shared with provinces and territories in accordance with agreements between the CFI and provincial/territorial funding authorities, as permissible pursuant to the Privacy Act.

Funding decisions

The funding recommendation is sent to the CFI Board of Directors for a funding decision at its next scheduled meeting. Institutions will be notified by email when decisions and review materials are uploaded in CAMS.